

PPL13 PROJECT NOMINEE FACT SHEET

March 12, 2003

Project Name: Spanish Pass Diversion

Coast 2050 Strategy

Regional #8 - Construct most effective small diversions into marsh with outfall management.

Project Location

Region 2, Mississippi River Delta Basin, Plaquemines Parish, The project is located near Venice, between Spanish Pass and Tidewater Road.

Problem

Marsh in the project area is not receiving sediment and is becoming open water. The principle hydrologic changes in the area are due to the dredging of canals for the Venice Oil Field, roads and other infrastructure. This has caused Spanish and Red Pass to be cut-off from the influence of the Mississippi River thus starving the area of freshwater sediments and nutrients. These processes have resulted in the loss of more than 3,900 acres of fresh marsh and swamp.

Goals

The primary goal is to gain emergent marsh to the maximum extent practicable in an otherwise open water environment.

Proposed Solution

The project involves diverting water from Grand Pass (a distributary of the Mississippi River) near the Venice Marina into Spanish Pass, Red Pass and a large open water area as shown on the project map. An uncontrolled diversion structure would be constructed to divert the water into the receiving area. Spanish and Red Passes would be cleaned out by bucket dredges in order to carry the river water into the target areas. The spoil banks along Spanish Pass could be breached in a few places to allow freshwater to move into the northern portion of the project area. The structure could be sized such that Tidewater Road could pass over the structure or a bridge could be constructed. Also the size or capacity of the structure will be refined to optimize benefits, while limiting impacts to existing infrastructure.

Preliminary Project Benefits

By diverting water from Grand Pass into Spanish and Red Passes and the open water area, an estimated 348 acres of marsh would be left in the project area. The 348 acres of emergent marsh would be a 14% increase from what is expected to exist in the absence of the project. The loss rate reduction would be reduced by roughly 50% as a result of the freshwater diversion.

Compatibility with Coast 2050 Criteria

Wetland Elevation/Sustainability

A breach in the spoil bank will allow sediments to enter the shallow open water and return to a more natural state. Cleaning out of some natural openings will further encourage the movement of sediment into areas otherwise being sediment starved. A total of 348 accreted wetlands will be sustained over the project life.

Ecosystem Influence Area

The project beneficially influences a small area.

Structural Framework

The project maintains or restores a structural component of the coastal ecosystem by reintroducing freshwater flows and sediment into an area that has been sediment starved. The benefits impact greater than 50% of the ecosystem influence area for greater than 20 years.

Infrastructure

The project has a moderate net positive impact on critical infrastructure.

Organism and Material Linkages

The project allows a natural level of organism and material exchange consistent with the sustainability of the ecosystem.

Coast 2050 Habitat Objectives

Habitat currently located in the project area consists of fresh to intermediate marsh. The project would maintain and create emergent marsh and achieve the Coast 2050 habitat objective for this area by maintaining these marsh types.

Project Synergy

The project provides a moderate degree of synergy with other approved restoration projects.

Preliminary Construction Costs

The project has an estimated construction cost including 25% contingency of approximately \$8 million.

Preparer of Fact Sheet

Chris Monnerjahn, USACE, (504) 862-2415, Chris.Monnerjahn@mvn02.usace.army.mil

Sean Mickal, USACE, (504) 862-2037, michael.r.salyer@mvn02.usace.army.mil